2200 Series
0 to 800 psig Check Valves

Features
- Medium flow
- Single piece design
- Resilient o-ring

Benefits
- Maintenance free
- Dependable
- Economical

Technical Data
Body Construction Materials: Brass, 316 stainless steel
O-ring Materials: Buna N, ethylene propylene, neoprene, silicone, or Viton®
Operating Pressure: 0 to 800 psig (55 bar)
Proof Pressure: 1,200 psig (83 bar)
Cracking Pressure: 1 to 3 psig (0.07 to 0.21 bar)
Temperature Range: −70°F to +450°F (−57°C to +232°C)
Connection Sizes: ¼" to 1"

Note: Proper filtration is recommended to prevent damage to sealing surfaces.

How it Works
Open
Flow passes smoothly over poppet head with minimum turbulence and through the fluted guide without restriction.

Closing
O-ring automatically establishes line of contact with spherical seat to cushion closing and insure perfect sealing.

Closed
O-ring only seals. Full pressure is carried by metal-to-metal seat.
2200 Series

Dimensions, Pressure Drop & Flow Rates

![Diagram of 2200 Series dimensions](image)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Size</th>
<th>2249 &amp; 2262 Series</th>
<th>2224, 2232, 2233 &amp; 2259 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4”</td>
<td>10 psid Oil</td>
<td>15 psid Oil</td>
<td>5 psid Oil</td>
</tr>
<tr>
<td>2”</td>
<td>10 psid Oil</td>
<td>15 psid Oil</td>
<td>5 psid Oil</td>
</tr>
<tr>
<td>3/4”</td>
<td>10 psid Oil</td>
<td>15 psid Oil</td>
<td>5 psid Oil</td>
</tr>
<tr>
<td>1”</td>
<td>10 psid Oil</td>
<td>15 psid Oil</td>
<td>5 psid Oil</td>
</tr>
</tbody>
</table>

Maximum Allowable Pressure Drop

<table>
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<tr>
<th>Flow Rates</th>
</tr>
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<tr>
<td>Valve size</td>
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</tbody>
</table>

How to Order

22 59 B - 2 MM - 1

O-RING MATERIAL, TEMPERATURE & STANDARD CRACKING RANGE

<table>
<thead>
<tr>
<th>Material</th>
<th>Temperature</th>
<th>Cracking Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buna N</td>
<td>-65°F to +250°F</td>
<td>4.0 psig</td>
</tr>
<tr>
<td>EPR</td>
<td>-65°F to +300°F</td>
<td>4.0 psig</td>
</tr>
<tr>
<td>Neoprene</td>
<td>-40°F to +300°F</td>
<td>4.0 psig</td>
</tr>
<tr>
<td>Silicone</td>
<td>-70°F to +450°F</td>
<td>2.0 psig</td>
</tr>
<tr>
<td>Viton*</td>
<td>-20°F to +400°F</td>
<td>2.0 psig</td>
</tr>
<tr>
<td>Teflon*</td>
<td>-100°F to +400°F</td>
<td>4.0 psig</td>
</tr>
</tbody>
</table>

BODY MATERIAL

- B: Brass
- T1: 316 stainless steel

For PED applications, brass bodies are limited to a maximum temperature of +100°F (+38°C).

Please consult Circle Seal Controls or your local distributor for information on special connections, o-rings, operating pressures, reseal pressures and temperature ranges.

Leakage

- 2249, 2262 Series: zero at 3 psig to 800 psig
- 2259, 2232, 2233 & 2224 Series: zero at 1 psig to 800 psig
- 2220 Series: 10 cc/min maximum from zero to 75 psig; zero from 75 psig to 800 psig

Cracking Pressure

Minimum cracking pressure available: 0.1 psig

Maximum cracking pressure available: 7.0 psig

Note: Cracking pressure is defined as pressure at which flow is 5 cc/min, except the 2220 Series, for which flow is approximately 0.02 cfm. For standard cracking pressures and less (example: 2229 - 2MM - 3), the tolerance is ±0%, -100%. For cracking pressure greater than standard (example: 2259B - 2MM - 3), the tolerance is ±20%.

For Your Safety

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

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